National Marrow Donor Program®

Entrusted to operate the
C.W. Bill Young
Cell Transplantation Program

National Coordinating Center
3001 Broadway St. N.E.
Suite 100
Minneapolis, MN 55413-1753

Toll Free: 1 (800) 526-7809
Phone: (612) 627-5800
marrow.org

August 05, 2008

Commander Russell Shilling, USN
Program Officer, Medical Services Corps
Office of Naval Research (ONR 341)
875 N. Randolph St.
Arlington, VA 22203

Subject: **Quarterly Performance/Technical Report of the National Marrow Donor Program®**

Reference: Grant Award #N00014-06-1-0704 between the Office of Naval Research and the National Marrow Donor Program

Dear Commander Shilling:

Enclosed is subject document which provides the performance activity for each statement of work task item of the above reference for the period of April 1, 2008 to June 30, 2008.

Should you have any questions as to the scientific content of the tasks and the performance activity of this progress report, you may contact our Chief Medical Officer – Dennis L Confer, MD directly at 612-362-3425.

With this submittal of the quarterly progress report, the National Marrow Donor Program has satisfied the reporting requirements of the above reference for quarterly documentation. Other such quarterly documentation has been previously submitted under separate cover.

Please direct any questions pertaining to the cooperative agreement to my attention (612-362-3403 or at cabler@nmdp.org).

Sincerely,

Carla Abler-Erickson

Carla Abler-Erickson, MA
Sr. Contracts Representative

Enclosure: Quarterly Report with SF298

C: R. Baerga – ACO (ONR-Chicago), letter and enclosure
Dr. Robert J. Hartzman, CAPT, MC, USN (Ret): letter and enclosure
DTIC (Ste 0944): letter and enclosure
NRL (Code 5227): letter and enclosure
Dennis Confer, MD, Chief Medical Officer, NMDP, letter only
Michelle Setterholm, NMDP letter only

REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

1. REPORT DATE *(DD-MM-YYYY)*	2. REPORT TYPE	3. DATES COVERED *(From - To)*
05-08-2008	Quarterly	Apr – Jun 2008

4. TITLE AND SUBTITLE
Quarterly Performance / Technical Report

5a. CONTRACT NUMBER
N/A

5b. GRANT NUMBER
N00014-06-1-0704

5c. PROGRAM ELEMENT NUMBER
N/A

6. AUTHOR(S)
Setterholm, Michelle

5d. PROJECT NUMBER
N/A

5e. TASK NUMBER
Project 1, 2, 3, 4

5f. WORK UNIT NUMBER
N/A

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)
National Marrow Donor Program
3001 Broadway St., N.E., Ste. 500
Minneapolis, MN 55413

8. PERFORMING ORGANIZATION REPORT NUMBER
N/A

9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)
Office of Naval Research
875 N. Randolph St.
Arlington, VA 22203

10. SPONSOR/MONITOR'S ACRONYM(S)
ONR

11. SPONSORING/MONITORING AGENCY REPORT NUMBER
N/A

12. DISTRIBUTION AVAILABILITY STATEMENT
Approved for public release; distribution is unlimited.

13. SUPPLEMENTARY NOTES
N/A

14. ABSTRACT

1. Contingency Prepardness: Collect information from transplant centers, build awareness of the Transplant Center Contingency Planning Committee and educate the transplant community about the critical importance of establishing a nationwide contingency response plan.

2. Rapid Identification of Matched Donors : Increase operational efficiencies that accelerate the search process and increase patient access are key to preparedness in a contingency event.

3. Immunogenetic Studies: Increase understanding of the immunologic factors important in HSC transplantation.

4. Clinical Research in Transplantation**:** Create a platform that facilitates multicenter collaboration and data management.

15. SUBJECT TERMS
Research in HLA Typing, Hematopoietic Stem Cell Transplantation and Clinical Studies to Improve Outcomes

16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT	b. ABSTRACT	c. THIS PAGE	Same as Report	19	Dennis L. Confer, MD – Chief Medical Office
U	U	U			19b. TELEPONE NUMBER (*Include area code*) 612.362.3425

NATIONAL MARROW DONOR PROGRAM®

Creating Connections. Saving Lives.™

Grant Award N00014-06-1-0704

QUARTERLY
PERFORMANCE / TECHNICAL REPORT
FOR
APRIL 01, 2008 to JUNE 30, 2008

Office of Naval Research

And

The National Marrow Donor Program
3001 Broadway Street N.E.
Minneapolis, MN 55413
1-800-526-7809

QUARTER PROGRESS REPORT

Development of Medical Technology for Contingency Response to Marrow Toxic Agents

April 01, 2008 through June 30, 2008

TABLE OF CONTENTS

IIA. Contingency Preparedness – Hypothesis 1: Recovery of casualties with significant myelosuppression following radiation or chemical exposure is optimal when care plans are designed and implemented by transplant physicians	
IIA.1.1 Aim 1: Secure Interest of Transplant Physicians	**The NMDP works to educate physicians and their medical staff as well as to disseminate information about its contingency planning through this AIM.** **Period 7 Activity:** • Between April 1 and June 30, 2008 59 Basic Radiation Training (BRT) exams were submitted by RITN centers; as of July 1, 2008 a total of 852 BRT exams had been submitted with a passing rate of 97.6%. • During this period we initiated an advanced training course for RITN center staff to attend. Two sessions of the course were conducted during this period. The course is titled Advanced Radiation Medical Emergency training and was conducted in Oakridge, TN at the Radiation Emergency Assistance Center/Training Site (REAC/TS). Classes were held on May 15-16 and May 19-20. Attendance was comprised of RITN center staff (ranging from physicians, to physicians assistants, nurses to coordinators and administrative staff); 13 people attended the first training date and 25 attended the second date. A total of nine physicians attended the training (representing 24%). Course lessons included: o Basic Health Physics & Radiation Protection: Part I o A History of Serious Radiological Incidents: The Real Risk o Health Physics & Contamination Control: Part II o Radiation Detection, Monitoring & Protection Laboratory Exercise & Quiz o Diagnosis & Management of the Acute Radiation Syndrome (ARS) o Diagnosis & Management of Internal Contamination o Diagnosis & Management of Acute Local Radiation Injury & Case Review: Yanango Peru Incident o Radiation Sources & Radiological Terrorism o Radiation Emergency Area Protocol Demonstration o Radiation Emergency Medical Management Drill o Radiation Dose Estimations – Problem Solving Session

IIA.1.2 Aim 2: GCSF in Radiation Exposure	**This AIM focuses on non-transplant treatment guidelines and patient assessment related to the use of GCSF for patient treatment as a result of radiation exposure.** **Period 7 Activity:** During this period a workgroup evaluated the feasibility of RITN stockpiling GCSF in preparation for a radiological incident. • Workgroup members met by teleconference on April 21, May 15, and May 30, 2008. • Workgroup participants included: o Cullen Case, NMDP o Mark Stcyr, Oklahoma University Medical Center o Meredith Toma, PharmD, Oklahoma University o Joanne Hinkle, Coordinator, University of Pennsylvania o Mike Vozniak, University of Pennsylvania o Lisa Gunderson, NMDP o Jennifer Venero, NMDP • Project purpose: To determine the feasibility and effectiveness of a Radiation Injury Treatment Network (RITN) hospital managed increase in inventory of G-CSF. • Project scope: Limit evaluation to how increasing inventory of G-CSF or a like product would affect RITN centers. If determined to be feasible the team will create a questionnaire for all RITN transplant centers to further investigate. • A report is being created to summarize the groups' findings.
IIA.1 3 Aim 3: Patient Assessment Guidelines and System Enhancements	**This AIM focuses on transplant treatment guidelines; including the refinement of guidelines for patient assessment, product selection and transplant in radiation exposure situations.** **Period 7 Activity:** • No activity this period

IIA 1.4 Aim 4: National Data Collection Model	**The focus of this AIM is to define and develop a national data collection and management model to collect data from a mass radiological exposure event.** **Period 7 Activity:** • Planned for a meeting with the EBMT Nuclear Accident Committee Ulm, Germany on June 30 and July 1st, 2008. A portion of the meeting agenda was to discuss collaboration with European counterparts to standardize the data collection plan used in response to a radioactive disaster with mass casualties resulting in marrow toxic injuries.
IIA. Contingency Preparedness – Hypothesis 2: Coordination of the care of casualties who will require hematopoietic support will be essential in a contingency situation.	
IIA.2.1 Aim 1: Contingency Response Network	**Efforts related to this AIM are focused on the development of the Radiation Injury Treatment Network (RITN), a permanent organization of transplant centers, donor centers and cord blood banks to maintain a contingency response network.** **Period 7 Activity:** **Exercises:** • Continued to plan for two functional exercises with NMDP staff. This will allow for primary and back-up staff to each respond to a scenario that impacts NMDP operations at a significant level. **Meetings:** • Held three (3) conference calls with RITN centers to assist in completion of required tasks and to improve integration into the network. **Communications:** • Implemented the new database for RITN contacts. All RITN centers were asked to update their listed contacts; specifically RITN medical directors, and two coordinators. This was identified as a critical need during the TOPOFF 4 federal exercise.

IIA.2.2 Aim 2: Sibling Typing Standard Operating Procedures	**This goal of this AIM is to develop and test standard operating procedures, in conjunction with core transplant centers, to manage the activities required to HLA type siblings of casualties to evaluate their potential as HSC donors for their affected family member.** **Period 7 Activity:** • The NMDP HLA search strategy group was presented with a one day contingency drill of 100 patient HLA typings to test the efficiency and standard operating procedures in responding to an influx of patients needing HLA search reviews during a contingency event. This drill was successful in completing the volume of 100 searches in a single day and also provided an estimation of the time needed to complete concise donor and cord recommendations without the full search strategy review write-up. Communication during this drill was vital and allowed available staff to assist others in completion of patient searches. The 8 internal staff who participated in the drill provided prioritized donor selection strategies for all 100 patient searches in an average time of 19.5 minutes per search.
IIA. Contingency Preparedness – Hypothesis 3: NMDP's critical information technology infrastructure must remain operational during contingency situations that directly affect the Coordinating Center.	
IIA.3.1 Aim 1: I.T. Disaster Recovery	**The focus of this AIM is to ensure NMDP's ability to access and utilize its information management and communication infrastructure in a contingency situation in which its Minneapolis Coordinating Center is damaged or destroyed.** **Period 7 Activity:** • **Business Continuity Planning:** o Emergency communications: ▪ During April 2008 we conducted an NMDP Network communication test, satellite telephone test, GETS card test, emergency notification system test, and a public announcement system test. ▪ Each of these verifies that the applicable systems function properly. ▪ Tested the expansion of NMDP Network center contacts in the bulk telephonic emergency notification system. This worked well except for one complication that the system does not recognize extensions. The NMDP is working with the vendor to overcome this issue to ensure our ability to rapidly notify the Network in the event the Coordinating Center is not operational. o Completed the development of the Business Impact Analysis (BIA) with key NMDP operational

	departments, identifying critical areas that would have high impact to operations if rendered inoperable. o Completed development of continuity books for distribution to NMDP operated centers o Continued to develop a business continuity plan incorporating a Critical Staff Recovery Site (CSRS) with no initial cost to the organization
IIB. Rapid Identification of Matched Donors – Hypothesis 1: Increasing the resolution and quality of the HLA testing of volunteers on the registry will speed donor selection.	
IIB.1.1 Aim 1: Increase Registry Diversity	**Period 7 Activity:** Six contracted HLA testing laboratories performed HLA-A, B, DRB1 typing on 64,518 newly recruited donors • Blind quality control testing error rate was 0.04%, meeting the project requirement of ≤ 1.5%. • On-time testing completion rate was 97%, meeting the project requirement of a minimum of 85% of typing results reported within 14 days of shipment of samples. Contracts for the six laboratories were extended to September 28, 2008. A Request for Quotation (RFQ C08-0018) was released to the laboratories on June 26, 2008. Proposals are due August 15, 2008. Agreements will be awarded for the period September 29, 2008 to September 27, 2009.
IIB.1.2 Aim 2: Evaluate HLA-DRB1 High Res typing	**Period 7 Activity:** This task is closed.
IIB.1.3 Aim 3: Evaluate HLA-C Typing of Donors	**Period 7 Activity:** This task is closed.
IIB.1.4 Aim 4: Evaluate Buccal Swabs	**Period 7 Activity:** The Sample Storage Research Study (SSRS) began in September, 2007. The first time point for donor swab evaluation was September, 2007. The first time point for Quality Control (QC) swab evaluation was December, 2007, and the second time point was June, 2008. Results are pending for the second QC time point and will be reported in the next quarter.

IIB 1.5 Aim 5: Enhancing HLA Data for Selected Donors	**Period 7 Activity:** This aim consists of two prospective, registry-based typing projects, which have the potential to strategically identify and improve the HLA typing and availability of donors most likely to match searching patients from domestic TCs. The primary goal of the Replacement Donor Pilot Study was to identify an HLA-A, B, DRB1 identical replacement donor for every donor selected for workup by a TC. • NMDP staff continued to monitor the patient-directed utilization of donors typed through the project. Donor utilization will be analyzed and reported at regular intervals. The primary objective of the Optimum Donor Pilot Study was to develop a systematic strategy to classify adult donors into phenotype categories based upon the likelihood to appear on a patient's search. Adult donors with high potential to match searching patients were selected and proactively contacted to verify availability, upgrade HLA, and/or secure additional stored samples in an effort to increase the utilization of NMDP donors and to help reduce the search times for patients. • NMDP staff continued to ship selected donor samples for prospective HLA typing. Donor selection strategies were extended to include the search for potentially matching HLA-A, B only typed donors for patient phenotypes without a potential 6 of 6 HLA match in the NMDP registry. • NMDP staff continued to monitor the patient-directed utilization of donors typed through the project. Donor utilization will be analyzed and reported at regular intervals.
IIB. Rapid Identification of Matched Donors – Hypothesis 2: Primary DNA typing data can be used within the registry to improve the quality and resolution of volunteer donor HLA assignments.	
IIB 2.1 Aim 1: Collection of Primary Data	**Period 7 Activity:** • No activity this period.
IIB 2.2 Aim 2: Validation of Logic of Primary Data	**Period 7 Activity:** • This task is closed.

IIB 2.3 Aim 3: Reinterpretation of Primary Data	**Period 7 Activity:** • This task is closed.
IIB 2.4 Aim 4: Genotype Lists & Matching Algorithm	**Period 7 Activity:** • No activity this period.
IIB. Rapid Identification of Matched Donors – Hypothesis 3: Registry data on HLA allele and haplotype frequencies and on the nuances of HLA typing can be used to design computer algorithms to predict the best matched donor.	
IIB.3.1 Aim 1: Phase I of EM Haplotype Logic	**Period 7 Activity:** • No activity this period.
IIB 3.2 Aim 2: Enhancement of EM Algorithm	**Period 7 Activity:** • No activity this period.
IIB 3.3 Aim 3: Optimal Registry Size Analysis	**Period 7 Activity:** • No activity this period.
IIB 3.4 Aim 4: Target Under-represented Phenotypes	**Period 7 Activity:** • No activity this period.
IIB 3.5 Aim 5: Bioinformatics Web Site	**Period 7 Activity:** • No activity this period.

IIB 3.6 Aim 6: Consultants to Improve Algorithm	**Period 7 Activity:** • Funding on this Aim supports the Search Strategy Advice (SSA) program provided to TCs to support their need for expert HLA expertise. The program includes external and internal HLA experts who review each patient search and write a report summarizing a search strategy; both internal and external experts participate in a rigorous QC program. This report assists the TC in rapidly identifying the best potential stem cell source for their patient. The SSA program completed 376 patient reports for 73 TCs during this quarter. The average turnaround time for all reviews was 3.8 business days which exceeded our program requirement of 5 business days. • The NMDP performed an analysis to test the effectiveness of the HapLogic search algorithm. The dataset consisted of 116 patient searches that had received expert HLA consultations from March to October 2006. The order of donors placed on the HapLogic search report was compared to the prioritized list of best donor recommendations generated by an HLA expert. The HapLogic algorithm sort order only considered HLA-A,-B,-DR loci, while consultants considered HLA-A,-B,-C,-DR,-DQ loci plus non-HLA factors in their donor recommendations. Results of this study show overall that HapLogic works well in ordering donors. Patient cases with a large number of candidate donors and patients with only very low probability donors according to HapLogic had less agreement between sort order and expert recommendation. In these cases, the HLA experts utilized additional sources of data, additional loci, or non-HLA donor characteristics to make their selections. The study will be repeated using enhancements made with the HapLogic II release.

IIB. Rapid Identification of Matched Donors – Hypothesis 4: Reducing the time and effort required to identify closely matched donors for patients in urgent need of HSC transplants will improve access to transplantation and patient survival in the context of a contingency response and routine patient care.	
IIB.4.1 Aim 1: Expand Network Communications	**Period 7 Activity:** • No activity this period.
IIB.4.2 Aim 2: Central Contingency Management	**Period 7 Activity:** Central Contingency Management uses trained NMDP coordinating center staff to provide comprehensive donor/cord selection recommendations and patient search monitoring for TC staff. Navy funds support the expansion of the Central Search Support (CSS) service for contingency management. During the quarter the NMDP continued efforts to expand this service to additional transplant centers. Centers undergoing staffing changes or shortages were approached for consideration of implementing this service. The continued expansion of CSS increases the NMDP's capabilities to provide centralized rapid turnaround search support in the event of a contingency event.
IIC. Immunogenetic Studies – Hypothesis 1: HLA mismatches may differ in their impact on transplant outcome, therefore, it is important to identify and quantify the influence of specific HLA mismatches. In contingency situations it will not be possible to delay transplant until a perfectly matched donor can be found.	
IIC.1.1 Aim 1: Donor Recipient Pair Project	**Period 7 Activity:** In 1994 a retrospective Donor/Recipient Pair HLA typing project to characterize class I and class II alleles of donor/recipient paired samples from NMDP's Repository was initiated. The goals of this ongoing research project are to assay the impact of DNA-based HLA matching on unrelated donor transplant outcome, develop strategies for optimal HLA matching, evaluate the impact of matching at alternative HLA loci on transplant outcome and finally to promote the development of DNA-based high resolution HLA typing methodologies. • Sample Group (SG)18 and19, which consisted of 867 donor/recipient and 86 cord/recipient paired samples, were audited and released for use in research studies. • The period of performance for SG20 began on May 1, 2008 and ends August 31, 2008. SG20 consists of 410 donor/recipient pairs and 90 cord/recipient pairs.

	• A new RFP for SG21 (500 pairs) was sent out to prospective bidders on June 9, 2008. This contract will not only include intermediate and high resolution HLA but also presence/absence testing for 14 KIR loci (2DL1-5, 2DS1-5, 3DL1-3 and 3DS1). • The project period for SG21 will begin September 1, 2008 and continue until December 31, 2008. Ongoing IT support and maintenance of project tasks continues.
IIC. Immunogenetic Studies – Hypothesis 2: Even when patient and donor are HLA matched, GVHD occurs so other loci may play a role.	
IIC 2.1 Aim 1: Analysis of non-HLA loci	**Period 7 Activity:** In 2005 a pilot study to perform high resolution KIR gene typing was launched. The primary objectives of the study were to move technology forward from the current practice of locus level typing to high resolution typing, disseminate information and protocols in an open source mechanism and develop reference lines for use in individual laboratories. The IPR database application will allow for storage and analysis of all immunogenetic data collected on NMDP research samples. • The Scientific Services and Bioinformatics departments continued to collaborate on the design and development of the IPR database application and tools to support immunogenetic testing projects • The contractor hired last quarter developed software for data loading and validation; it is scheduled for completion next quarter. • Programming specifications were written for results comparison; they are scheduled for completion next quarter. • Business requirements were written for various reports; they are scheduled for completion next quarter. • A prototype project to recreate informational data stores was started. • The database schema was enhanced and refined. • A Discrepancy RFQ for the KIR Typing Pilot project was sent out on April 25, 2008. Samples were shipped to the tiebreaker labs to resolve the final 91 discrepancies. • Resolution of new alleles found within Phase 1, 2 and 3 of the KIR Typing Pilot project continues.

	Many of the samples have been reanalyzed and several resolved using an updated KIR sequence database.
IIC 2.2 Aim 2: Related Pairs Research Repository	**Period 7 Activity:** Related transplant research sample collection began with a pilot project initiated at seven TCs following the release of FormsNet 2.0 in December 2007 for the collection of clinical outcome data under the SCTOD. At the end of the current quarter, 180 samples (78 donor/recipient pairs) had been submitted to the Repository from the pilot centers. A programmer was hired to complete the development of the Research Sample Repository Tools suite to facilitate the management of research samples. The enhancements to the current tools to support related sample management will be completed in the next quarter.
IID. Clinical Research in Transplantation – Hypothesis 1: Clinical research in transplantation improves transplant outcomes and supports preparedness for a contingency response.	
IID.1.1 Aim 1: Observational Research, Clinical Trials and NIH Transplant Center	**Period 7 Activity:** The Cord Blood Research sub-Committee met monthly to discuss study priorities and plan analyses. The group provided a progress report during the Cord Blood Committee meeting held on June 5, 2008 in Los Angeles. The subcommittee presented plans to address the following research priorities: Cord Blood Banking research topics: 1. Identify a reproducible potency assay for CBUs and segments 2. Impact of storage temperature and temperature fluctuation 3. Correlation of pre-freeze and post-freeze characteristics 4. Plasma depletion vs. RBC and plasma depletion 5. Generation and storage of dedicated CBU research samples at processing 6. Impact of donor race/ethnicity on cell recoveries Cord Blood Clinical issues: 1. Minimum cell dose requirements (TNC, CFU, CD34, etc…) and interpretation of inter-bank cell count variability 2. Level of HLA matching (loci, resolution and NIMA) 3. Importance of graft immunophenotyping and role of immune effector cells (NK, T cells, etc…) 4. Differential requirements for single or multiple CBU transplants

5. Importance of ABO compatibility, nRBCs, CBU age, patient characteristics, sex matching

Pilot studies to address the banking issues were developed during the quarter with implementation anticipated in the next quarter. Studies to address the clinical issues are in progress in the CIBMTR Graft Sources and Immunobiology Working Committees.

Observational Research

- Staff continued work on various observational studies within the area of Immunobiology and GVHD.
- During this reporting period one GVHD manuscript was published.
- A total of two manuscripts from the GVHD Working Committee were submitted to journals during this reporting period.
- See IID.1.1 Aim 3 for details on Immunobiology publications activity.

Prospective Studies; RCI BMT

- Activity related to the BMT CTN PBSC vs. Marrow trial continued with a total of 418 donor/patient pairs randomized at the end of this reporting quarter. Accrual at the end of June was 76% complete. At the end of this reporting period we began to see an increase in work-ups and randomizations which directly reflects efforts made to increase accrual and the goal of completion in early 2009.
- Adult Double Cord trial activity during this period included the activation of two additional sites for a total of 7 sites open to accrual. The additional 2 sites are expected to be open for accrual by the end of the next reporting period. Two patients were enrolled during this quarter for a total of 6 patients which meets our expected accrual goals.
- Completed Protocol development of proposal approved during at February 2007 Clinical Trail Application Committee (CTAC) meeting for *Evaluation of Lenalidomide as Maintenance Therapy Post Allogeneic Hematopoietic Cell Transplantation for High-risk Multiple Myeloma*. Development of electronic data collection system in progress and site IRB approvals and contracting are also in progress. Expect to begin activating sites for accrual by end of next reporting period.
- Activity began on protocol development for one of the studies approved by the CTAC at their

	February 2008 meeting. A protocol team was established and initial discussions have begun with the pharmaceutical company for funding support for a study titled *Low Intensity Therapy of MDS Prior to Non-Ablative Allogeneic Stem Cell Transplantation.* Staff continues to work to close the Renal Cell Carcinoma trial. Staff are working with sites to complete all required data submission on the four enrolled patients. A close out audit of each site will be performed with final closure expected by the end of 2008.
IID.1.2 Aim 2: Research with NMDP Donors	**Period 7 Activity:** • Staff continued to collaborate on a Donor Ethnicity study with Dr. Galen Switzer from the University of Pittsburgh. Activity increased during this reporting period due to the studies increased accrual goals. Staff resources are adequate to support this increase. • Staff continued to collaborate on a COG KIR study. Activities include facilitating the collection of a donor blood sample and shipment to the study lab. To date, two requests have been facilitated. • Staff continued to assess options for centralizing the NMDP long-term donor follow-up.
IID.1.3 Aim 3: Expand Immuno-biology Research	**Period 7 Activity:** The CIBMTR IBWC met monthly during the quarter to discuss progress on ongoing research studies • Three manuscripts were completed and submitted: o "Donors with Group B KIR Haplotypes Improve Relapse-Free Survival after Unrelated Hematopoietic Cell Transplantation for Acute Myelogenous Leukemia", Sarah Cooley, et al. submitted to Lancet. o "HLAMatchmaker-Defined Triplet Matching Is Not Associated with Better Survival Rates of Patients with Class I HLA Allele Mismatched Hematopoietic Cell Transplants from Unrelated Donors", Rene Duquesnoy, et al. accepted pending minor revisions by Biology of Blood and Marrow Transplantation. o "TNF, LTA and TGFB1 Genotype Distributions among Acute Graft Versus Host Disease Subsets after HLA-Matched Allogeneic Hematopoietic Stem Cell Transplantation", Riddish

	Shah, et al. submitted to Tissue Antigens. • Two additional draft manuscripts were completed and will be submitted next quarter • IBWC staff prioritized studies for the coming year and focused efforts on studies targeted for submission for presentation at the 2008 American Society of Hematology meeting • The IBWC leadership continued collaboration with the IHWG Hematopoietic Cell Transplant Component to provide data and sample support to the upcoming 15th International Histocompatibility Workshop. Funding for CIBMTR IBWC studies: • DNA extraction of 3400 samples from the NMDP Research Sample Repository was completed and samples forwarded to the IHWG HCT component coordinating laboratory at the Fred Hutchinson Cancer Research Center. The extracted DNA will facilitate rapid SNP genotyping for several IHWG/CIBMTR projects • Several inquiries were received in advance of the grant submission deadline regarding availability of funding for new research projects. Several new proposals are expected in the next quarter.

ACRONYM LIST

AABB	American Association of Blood Banks	IND	Investigational New Drug
AML	Acute Myelogenous Leukemia	ICRHER	International Consortium for Research on Health Effects of Radiation
ARS	Acute Radiation Syndrome (also known as Acute Radiation Sickness)	IS	Information Services
ASBMT	American Society for Blood and Marrow Transplantation	IT	Information Technology
ASHI	American Society for Histocompatibility and Immunogenetics	IRB	Institutional Review Board
B-LCLs	B-Lymphoblastoid Cell Lines	KIR	Killer Immunoglobulin-like Receptor
BMT CTN	Blood and Marrow Transplant - Clinical Trials Network	NCI	National Cancer Institute
BRT	Basic Radiation Training	MHC	Major Histocompatibility Complex
C&A	Certification and Accreditation	MICA	MHC Class I-Like Molecule, Chain A
CBMTG	Canadian Blood and Marrow Transplant Group	MICB	MHC Class I-Like Molecule, Chain B
CBB	Cord Blood Bank	MUD	Matched Unrelated Donor
CBC	Congressional Black Caucus	NCBM	National Conference of Black Mayors
CBS	Canadian Blood Service	NIH	National Institutes of Health
CBU	Cord Blood Unit	NIMS	National Incident Management System
CHTC	Certified Hematopoeitic Transplant Coordinator	NK	Natural Killer
CIBMTR	Center for International Blood & Marrow Transplant Research	NMDP	National Marrow Donor Program
CLIA	Clinical Laboratory Improvement Amendment	NRP	National Response Plan
CME	Continuing Medical Education	NST	Non-myeloablative Allogeneic Stem Cell Transplantation
COG	Children's Oncology Group	OCR/ICR	Optical Character Recognition/Intelligent Character Recognition
CREG	Cross Reactive Groups	OIT	Office of Information Technology
CT	Confirmatory Testing	OMB	Office of Management and Budget
CTA	Clinical Trial Application	ONR	Office of Naval Research

CTAC	Clinical Trial Application Committee	PBMC	Peripheral Blood Mononuclear Cells
DIY	Do it yourself	PBSC	Peripheral Blood Stem Cell
DKMS	Deutsche Knochenmarkspenderdatei	PCR	Polymerase Chain Reaction
DMSO	Dimethylsulphoxide	PSA	Public Service Announcement
DNA	Deoxyribonucleic Acid	QC	Quality control
D/R	Donor/Recipient	RCC	Renal Cell Carcinoma
EBMT	European Group for Blood and Marrow Transplantation	RCI BMT	Resource for Clinical Investigations in Blood and Marrow Transplantation
EM	Expectation Maximization	REAC/TS	Radiation Emergency Assistance Center/Training Site
EMDIS	European Marrow Donor Information System	RFP	Request for Proposal
FBI	Federal Bureau of Investigation	RFQ	Request for Quotation
FDA	Food and Drug Administration	RITN	Radiation Injury Treatment Network
Fst	Fixation Index	SBT	Sequence Based Typing
GETS	Government Emergency Telecommunications Service	SCTOD	Stem Cell Therapeutics Outcome Database
GCSF	Granulocyte-Colony Stimulating Factor (also known as filgrastim)	SG	Sample Group
GvHD	Graft vs Host Disease	SSP	Sequence Specific Primers
HHS	Health and Human Services	SSOP	Sequence Specific Oligonucleotide Probes
HIPAA	Health Insurance Portability and Accountability Act	STAR®	Search, Tracking and Registry
HLA	Human Leukocyte Antigen	TC	Transplant Center
HML	Histoimmunogenetics Mark-up Language	TED	Transplant Essential Data
HR	High Resolution	TNC	Total Nucleated Cell
HRSA	Health Resources and Services Administration	TSA	Transportation Security Agency
HSC	Hematopoietic Stem Cell	URD	Unrelated Donor
IBWC	Immunobiology Working Committee	WMDA	World Marrow Donor Association
IDM	Infectious Disease Markers	WU	Work-up
IHWG	International Histocompatibility Working Group		